CLAIMS

What is claimed is:

1. A portable electronic device, which includes:

a wireless communication module to communicate with a separate access device in a wireless fashion;

a data storage module to store emulation data to emulate an electronic apparatus; and

a controller to control the communication of the emulation data to the access device to output to a user to emulate the electronic apparatus.

2. A device as claimed in Claim 1, in which the data storage module stores display data, the portable electronic device being configured to communicate the display data to the access device to provide a display layout that simulates the physical appearance of the electronic apparatus.

3. A device as claimed in Claim 2, in which the display layout is defined by a plurality of skins that are stored on the portable electronic device and communicated in a wireless fashion to the access device.

4. A device as claimed in Claim 2, in which the display layout includes function buttons that substantially resemble function buttons on the electronic apparatus in appearance and which, when activated by a pointing device, cause the portable electronic device to execute substantially similar functions to the function buttons on the electronic apparatus.

5. A device as claimed in Claim 1, in which the wireless communication module is a radio frequency (RF) device that communicates over a limited range using a standard wireless communication protocol.

6. A device as claimed in Claim 5, in which the standard wireless communication protocol is selected from the group including Bluetooth IEEE 802.15, IEEE 802.11a, and IEEE 802.11b.

7. A device as claimed in Claim 1, in which the access device includes a user multimedia interface, the portable electronic device being configured to communicate the emulation data to the user multimedia interface to provide an output to a user.

8. A device as claimed in Claim 7, in which the access device exclusively defines an interface with the user and the multimedia interface provides an audio output device to output audio sourced from the portable electronic device.

9. A device as claimed in Claim 8, in which the portable electronic device emulates the functionality of at least one electronic apparatus selected from the group including an MP3 player, a personal digital assistant (PDA), an electronic book, a dictionary, a calculator, a cellular telephone, a calorie counter, a game playing device, and a smart card.

10. A device as claimed in Claim 7, in which the portable electronic device determines if the access device has the output capabilities to provide the functionality of the electronic apparatus prior to communicating the display data and the emulation data to the access device.

11. A device as claimed in Claim 1, in which communication is effected using Universal Plug and Play standards.

12. An emulation system, which includes:

a portable electronic device to emulate functionality provided by an electronic apparatus, the portable electronic device including a wireless communication module and a data storage module to store emulation data; and

a separate access device including a wireless communication interface to communicate with the wireless communication module when

the portable electronic device is within a wireless communication range of the access device, the portable electronic device communicating emulation data to the access device to output to a user to emulate the electronic apparatus.

13. A system as claimed in Claim 12, in which the data storage module stores display data, the portable electronic device being configured to communicate the display data to the access device to provide a display layout that simulates the physical appearance of the electronic apparatus.

14. A system as claimed in Claim 13, in which the display layout is defined by a plurality of skins that are stored on the portable electronic device.

15. A system as claimed in Claim 13, in which the display layout includes function buttons that substantially resemble function buttons on the electronic apparatus in appearance and which, when activated by a pointing device, cause the system to execute substantially similar functions to the function buttons on the electronic apparatus.

16. A system as claimed in Claim 12, in which the wireless communication module and interface are radio frequency (RF) devices that communicate over a limited range using a standard wireless communication protocol.

17. A system as claimed in Claim 16, in which the standard wireless communication protocol is selected from the group including Bluetooth IEEE 802.15, IEEE 802.11a, and IEEE 802.11b.

18. A system as claimed in Claim 12, in which the portable electronic device emulates the functionality of the electronic apparatus selected from the group including an MP3 player, a personal digital assistant (PDA), an electronic book, a dictionary, a calculator, a cellular telephone, a calorie counter, a game playing device, and a smart card.

19. A system as claimed in Claim 12, in which the access device exclusively defines an interface with the user and the emulation data includes at least one of audio data , text data, and numeric data.

20. A method, which includes:

monitoring when a portable electronic device is within a wireless communication range of an access device, the portable electronic device emulating the functionality of an electronic apparatus; and

communicating emulation data stored on the portable electronic device to the access device in a wireless fashion to provide an output to a user.

21. A method as claimed in Claim 20, which includes communicating display data to the access device to provide a display layout that simulates the physical appearance of the electronic apparatus.

22. A method as claimed in Claim 21, in which the display data defines a plurality of skins that provide the display layout.

23. A method as claimed in Claim 21, which includes:

communicating display data that defines a plurality of function buttons that substantially resemble function buttons on the electronic apparatus in appearance;

monitoring when a pointing device selects a particular function button;

executing the function on the portable electronic device; and

communicating emulation data to the access device to output to the user.

24. A method as claimed in Claim 20, which includes communicating between the portable electronic device and the access device using a standard radio frequency (RF) wireless communication protocol.

25. A method as claimed in Claim 20, in which the standard wireless communication protocol is selected from the group including Bluetooth IEEE 802.15, IEEE 802.11a, and IEEE 802.11b.

26. A method as claimed in Claim 20, which includes emulating the functionality of at least one electronic apparatus selected from the group including an MP3 player, a personal digital assistant (PDA), an electronic book, a dictionary, a calculator, a cellular telephone, a calorie counter, a game playing device, and a smart card.

27. A method as claimed in Claim 21, which includes determining if the access device has the capability to provide the display layout and output the emulation data prior to communicating the display data and emulation data to the access device.

28. A method as claimed in Claim 20, which includes communicating using Universal Plug and Play standards.

29. A computer program product including a medium readable by a computer, the medium including instructions which, when executed by the computer, cause the computer to:

monitor when a portable electronic device is within a wireless communication range of an access device; and

communicate emulation data stored on the portable electronic device to the access device in a wireless fashion to output to a user to emulate the electronic apparatus.

30. A computer program product as claimed in Claim 29, which includes communicating display data to the access device in a wireless fashion, the display data defining a display layout that substantially simulates a physical appearance of the electronic apparatus.

31. A computer program product as claimed in Claim 29, in which the display data defines a plurality of skins that are displayed on the display.

32. A computer program product as claimed in Claim 29, which:

communicates display data that defines a plurality of function buttons that substantially resemble function buttons on the electronic apparatus in appearance;

monitors when a pointing device selects a particular function button;

executes the function on the portable electronic device; and

communicates emulation data to the access device to output to the user.

33. A computer program product as claimed in Claim 29, in which communication between the portable electronic device and the access device is by way of a standard radio frequency (RF) wireless communication protocol.

34. A computer program product as claimed in Claim 33, in which the standard wireless communication protocol is selected from the group including Bluetooth IEEE 802.15, IEEE 802.11a, and IEEE 802.11b.

35. A computer program product as claimed in Claim 29, which emulates the functionality of at least one electronic apparatus selected from the group including an MP3 player, a personal digital assistant (PDA), an electronic book, a dictionary, a calculator, a cellular telephone, a calorie counter, a game playing device, and a smart card.

36. A computer program product as claimed in Claim 30, which determines if the access device has the capability to provide the display layout and output the emulation data prior to communicating the emulation data to the access device.

37. A computer program product as claimed in Claim 29, which monitors when the portable electronic device and the access device are within a predetermined physical range, the physical range defining a restricted zone within which the

access device assumes that a user bearing the portable electronic device requires use of the access device.

38. A computer program product as claimed in Claim 29, which communicates using Universal Plug and Play standards.